Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

CLAIMS

1. (presently amended) A method of producing one or more packetized signals from one or more input signals comprising:

(a) receiving one or more input signals;

(b) buffering each of the input signals in a memory system;

(c) designating at least some of the input signals as packet source signals and assigning each of the packet source signals a unique global identification code; and

(d) retrieving one or more of the packet source signals and generating one or more packetized signals wherein each of the packetized signals includes a series of packetized signal packets, wherein each of the packetized signal packets contains the unique global identification code of one of the packet source signals and data corresponding to the same packet source signal, wherein at least one of the packet source signals is a video signal and wherein each packetized signal corresponding to the video signal includes video data and position information indicating how the video data is to be displayed on a video display,

wherein each of the one or more packetized signals may be further processed using the unique global identification code of each packetized signal packet to produce one or more output signals.

2. (previously presented) The method of claim 1 wherein each of the packetized signal packets is formed by retrieving one or more packet source signal packets

corresponding to a single packet source signal, and extracting data from the retrieved packet source signal packets so to include at least a portion of the extracted data within the data of the packetized signal packet.

3. (cancelled)

4. (previously presented) The method of claim 1 wherein each of the packetized signal packets further includes packet sequencing information.

5. (cancelled)

6. (presently amended) The method of claim 1 wherein the position information includes pixel information indicating a position within a window of the video display at which the video data is to be displayed.

7. (cancelled)

8. (cancelled)

9. (presently amended) A method of producing one or more output signals from one or more input signals, the method comprising:

(a) receiving one or more input signals;

(b) buffering each of the input signals in an input processor memory system;

(c) designating at least some of the input signals as packet source signals and assigning each of the packet source signals a unique global identification code;

(d) retrieving one or more of the packet source signals and generating one or more packetized signals wherein each of the packetized signals includes a series of packetized signal packets, wherein each of the packetized signal

packets contains the unique global identification code of one of the packet source signals and data corresponding to the same packet source signal, wherein at least one of the packet source signals is a video signal and wherein each packetized signal corresponding to the packet source signal includes video data and position information indicating how the video data is to be displayed on a video display;

(e) transmitting the one or more packetized signals across a communications link;

(f) receiving the one or more packetized signals;

(g) extracting each of the packetized signal packets from the one or more packetized signals;

(h) buffering each of the packetized signal packets containing the same unique global identification code in a separate data buffer in an output processor memory system and designating the packetized signal packets in each separate data buffer as an output source signal; and

(i) producing one or more output signals by retrieving one or more output source signals and combining the retrieved output source signals.

10. (previously presented) The method of claim 9 wherein each of the packetized signal packets is formed by retrieving one or more packet source signal packets corresponding to a single packet source signal, and extracting data from the retrieved packet source signal packets so to include at least a portion of the extracted data within the data of a packetized signal packet.

11. (cancelled)

12. (cancelled)

13. (cancelled)

14. (previously presented) A system for receiving one or more input signals and for producing one or more output signals, the system comprising:

(a) a master controller for generating input processor control signals and output processor control signals;

(b) an input processor having:

(i) one or more input ports for receiving the input signals;

(ii) one or more input signal processors for processing the input signals to provide one or more processed signals

(iii) an input processor memory system for buffering the input signals and the processed signals, wherein at least some of the buffered signals are designated as packet source signals;

(iv) one or more packetized signal output ports;

(iv) one or more packetized signal output stages for retrieving one or more of the packet source signals from the input processor memory system and for producing one or more packetized signals at the packetized signal output ports, wherein each of the packetized signals includes a series of packetized signal packets, wherein each of the packetized signal packets contains a unique global identification code of one of the packet source signals and data corresponding to the same packet source signal; and

(v) an input processor local controller for controlling the operation of at least the signal processors and the packetized signal output stages in response to the input processor control signals;

(c) an output processor having:

(i) one or more packetized signal input ports for receiving the packetized signals;

(ii) one or more packetized signal input stages for extracting data corresponding to each of the packet source signals from each of

the packetized signals and for storing data corresponding to each of the packet source signals in a separate buffer in the output processor memory system as an output source signal based on the unique global identification code in the packetized signal packets of each packetized signal;

(iii) one or more output signal generators for providing one or more output signals, each of the output signals corresponding to one or more of the output source signals;

(iv) an output processor local controller for controlling the operation of the packetized signal input stages and the output signal generators in response to the output processor control signals; and

(d) a communications link coupled between the one or more packetized signal output ports and the one or more packetized signal input ports.

15. (cancelled)

16. (previously presented) The system of claim 14 wherein the signal processors include one or more video scalers for providing a scaled version of the one or more input signals as one or more processed signals.

17. (previously presented) The system of claim 14 wherein the signal processors include one or more data compression elements for providing a scaled version of the one or more input signals as one or more processed signals.

18. (original) The system of claim 14 further comprising one or more A/D converters coupled between one or more of the input ports and the input processor memory system.

19. (original) The system of claim 17 wherein the data compression elements include one or more horizontal line filters.

20. (original) The system of claim 17 wherein the data compression elements include one or more vertical line filters.

21. (presently amended) An input processor comprising:

(a) one or more input ports for receiving the input signals;

(b) one or more input signal processors for processing the input signals to provide one or more processed signals

(c) an input processor memory system for buffering the input signals and the processed signals, wherein at least some of the buffered signals are designated as packet source signals;

(d) one or more packetized signal output ports;

(e) one or more packetized signal output stages for retrieving one or more of the packet source signals from the input processor memory system and for producing one or more packetized signals at the packetized signal output ports, wherein each of the packetized signals includes a series of packetized signal packets, wherein each of the packetized signal packets contains a unique global identification code of one of the packet source signals and data corresponding to the same packet source signal, wherein at least one of the packet source signals is a video signal and wherein each packetized signal corresponding to the packet source signal includes video data and position information indicating how the video data is to be displayed on a video display; and

(f) an input processor local controller for controlling the operation of at least the signal processors and the packetized signal output stages in response to the input processor control signals.

22. (original) The input processor of claim 21 wherein the signal processors include one or more video scalers for processing an scaled version of the input signal as a processed signal.

23. - 28. (cancelled)

29. (previously presented) The method of claim 1 further comprising processing at least one of the input signals to provide one or more processed signals and buffering the one or more processed signals in the memory system; and wherein said designating comprises designating at least some of the input signals or the processed signals as packet source signals.

30. (previously presented) The method of claim 29 wherein the processing step includes scaling at least one of the input signals to provide a processed signal.

31. (previously presented) The method of claim 29 wherein the processing step includes compressing at least one of the input signals to provide a processed signal.

32. (previously presented) The method of claim 9 further comprising processing at least one of the input signals to provide one or more processed signals and buffering the one or more processed signals in the input processor memory system; and wherein said designating comprises designating at least some of the input signals or the processed signals as packet source signals.

33. (previously presented) The method of claim 32 wherein the processing step includes scaling at least one of the input signals to provide a processed signal.

34. (previously presented) The method of claim 32 wherein the processing step includes compressing at least one of the input signals to provide a processed signal.

35. (presently amended) A method of producing one or more output signals from one or more packetized signals, the method comprising:

(a) receiving the one or more packetized signals, wherein each of the packetized signals includes a series of packetized signal packets, wherein each of the packetized signal packets contains a unique global identification code of a packet source signal and data corresponding to the same packet source signal, wherein at least one of the packet source signals is a video signal and wherein each packetized signal corresponding to the packet source signal includes video data and position information indicating how the video data is to be displayed on a video display;

(b) extracting each of the packetized signal packets from the one or more packetized signals;

(c) buffering each of the packetized signal packets containing the same unique global identification code in a separate data buffer in an output processor memory system and designating the packetized signal packets in each separate data buffer as an output source signal; and

(d) producing one or more output signals by retrieving one or more output source signals and combining the retrieved output source signals.

36. (presently amended) An output processor comprising:

(a) one or more packetized signal input ports for receiving one or more packetized signals;

(b) one or more packetized signal input stages for extracting data corresponding to a packet source signal from each of the packetized signals and for storing data corresponding to each of the packet source signals in a separate buffer in an output processor memory system as an output source signal based on a unique global identification code in the

packetized signal packets of each packetized signal, wherein at least one of the packet source signals is a video signal and wherein each packetized signal corresponding to the packet source signal includes video data and position information indicating how the video data is to be displayed on a video display;

(c) one or more output signal generators for providing one or more output signals, each of the output signals corresponding to one or more of the output source signals; and

(d) an output processor local controller for controlling the operation of the packetized signal input stages and the output signal generators in response to the output processor control signals.